

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) ~~[[An]]~~ A sinker electric discharge machining method  
~~comprising the steps of apparatus for forming a cavity comprising:~~  
a device for setting a removal surface area (S);  
an input device for setting a dimension of material to be removed (d) and  
machining conditions;  
a storage device for storing a database correlating removal volume rate (Vm) with  
machining conditions;  
~~setting a plurality of machining conditions;~~  
~~obtaining a removal volume (V) corresponding to a volume of material to be~~  
~~removed from a workpiece based on the removal surface area (S) and the dimension of material~~  
~~to be removed (d);~~  
~~obtaining a removal volume rate (Vm) corresponding to the set plurality of~~  
~~machining conditions;~~  
determining a calculating device for extracting the removal volume rate (Vm)  
corresponding to the set machining conditions from the storage device, and calculating a  
machining time (T) based on the removal volume (V) the removal surface area (S), the  
dimension of material to be removed (d) and the removal volume rate (Vm); and  
~~starting electric discharge machining of the workpiece in accordance with the set~~  
~~plurality of machining conditions; and~~  
a device for completing electric discharge machining of the workpiece with  
increase in dimension of the cavity when the machining time (T) has elapsed from [[the]] a start  
of electric discharge machining.

2-6. (Canceled).